

AMENDMENTS TO THE SPECIFICATION:

Following page 70 of the specification, please insert a page containing the following Abstract:

-- **ABSTRACT OF THE DISCLOSURE**

The present invention provides novel genes involved in cellulose biosynthesis and methods using such genes to modulate cellulose biosynthesis in fiber-producing plants such as cotton. The invention also provides methods for identifying and isolating alleles of these genes in a population of fiber-producing plants that correlate with the quality of the produced fibers. --